

Erie County Executive Energy Achievement Award

Name of the Project:

Comprehensive Townwide Energy Audit and
Energy Performance Contracting
Town of Amherst Job #990080

Name of Organization:

Town of Amherst
Engineering Department

Address:

1100 North Forest Road
Williamsville, NY 14221

Name of the applicant or contact:

James I. Johnson, P.E. – Assistant Town Engineer
Paul M. Bowers, P.E. – Town Engineer

Phone number of contact person:

(716) 631-7154

Dates of project conception and completion: from August 1999 to
September 2015 (multi phased project see below.)

Describe the condition that first caused the project to be considered:

Rising energy costs and deregulation of Gas and Electric. Also participated
with NYSERDA.

What was the initial goal of the project?

To save energy usage within the Town following New York Energy Law
Article 9 – Energy Performance Contracts in Connection with Public Buildings
and Facilities.

Was renewable energy technology considered for the project and how? Yes.

Digester Bio-GAS

Burn in new gas engine and use excess heat to heat the Digesters and other
buildings at the Town of Amherst WPCF (Water Pollution control Facility.)

What steps were taken to achieve the goal?

- Town of Amherst Town Board Authorization Aug. 2, 1999
- To look at the following areas:
 1. Solar energy
 2. Wind energy
 3. Water energy
 4. Compressed natural gas
 5. Electric vehicles
 6. Drilling for natural gas and oil
 7. Energy conservation measures
 8. De-regulation of utilities
 9. County, State & Federal grants
 10. Greenhouse gases
 11. New material supplies, appliances and technologies
- Town of Amherst Town Board – Comprehensive Town Wide Energy Audit of all Town Facilities Authorization Aug. 16, 1999
- Contract with NYSERDA Flex Consultant
- RFP for Energy Service Companies (ESCO) Set Apr 17 for May 1, 2000
- RFQ for Water Pollution Control Facility (WPCF) Consultant to work with Selected ESCO for WPCF Phase also set for May 1, 2000
- Letter of Intent (LOI) with selected ECSCO for Phase I June 19, 2000
- Contract with Buffalo & Erie County Public Library
- LOI for Town owned Libraries - Phase IIA
- Substantial Completion - Phase I & Start of Guarantee from Nov. 1, 2001 to Oct. 31, 2012
- Substantial Completion - Phase IIA & Start of Guarantee from June 3, 2002 to June 2, 2013
- First Year Audit of Phase I Savings
- Substantial Completion - Phase IIB & Start of Guarantee from June 15, 2003 to June 14, 2014
- First Year Audit of Phase IIA Savings
- Second Year Audit of Phase I Savings
- Substantial Completion - Phase IIB Amended & Start of Guarantee from Sept. 21, 2004 to Sept. 20, 2015
- Second Year Audit of Phase IIA Savings
- First Year Audit of Phase IIB Savings

What were the obstacles to completion of the projects?

Subcontractors to the ESCO were not as quick to respond as the ESCO. Also the lack of specific Engineering of Critical areas of the various Facility Improvement Measures (FIMs) caused delays in construction of the FIMs.

What support did the project receive?

Energy Conservation Advisory Committee full participation and support.
Full Support of Town Department Heads
Full Town Board support.
\$25,000 Grant from National Fuel
\$1,350,000 +/- Incentives from NYSERDA

What was the projected pay-back period for the project?

Less than 10 years.

Is the pay-back on target?

Yes.

What are the results of the project? (such as: reduction in energy use, reduction of emissions, reduction in utility cost, etc.)

The FIMs have reduced energy usage more than the guaranteed amounts for all Phases totaling \$725,000 which will result in an earlier payback than predicted.

What would you do differently on the next energy project?

Make sure more of the FIMs are measured and verified so any changes to the operations of the FIMs will be better tracked and verified.

Also make sure all Departments clearly understand how to Budget for the energy Savings to be used during the Guarantee period.

What do you or your organization consider the most positive secondary outcome from the project?

Ability to fund capital improvement(s) using budgeted energy costs saved to fund the improvements at no additional cost to the Town Residents.

Are you currently purchasing any "green" energy?

Not at this time. The Amherst Utility Cooperative (AUC) is looking into these areas.

How will you or your organization be willing to mentor others in starting an energy conservation project?

We would be happy to talk to anyone about Energy Performance Contracting.

May we post/publish your project on our web site?

Yes.

We have included several presentations that have been given on this subject for your information.